

REMARKS

The examiner has rejected claims 5-6 and 11-14 under 35 U.S.C. 103 as unpatentable over art discussed in the background section of the application in view of Smiley, U.S. patent 6,459,297. In doing so, the Examiner has relied on a bit description in a Xilinx specification that allows readback of contents of an EEPROM for verifying a configuration code has been correctly written into the EEPROM.

Claim Amendments

Claims 11-12 are cancelled without prejudice.

The enclosed copy of amended claims lacks text printed with strikethrough text in the prior amendments, so that Claim 5 clearly shows that it is dependent upon claim 13 and not on nonexistent claim 134.

Claim 6 has been made dependent upon claim 5 instead of previously cancelled claim 4

Claim 13 has been amended to delete a redundant word, "is".

New claim 14 specifically requires that the step of "reading board identification information through the board-specific serial bus to the configuration apparatus, and verifying compatibility of the configuration code with a circuit board" include polling the serial bus to "determine the JTAG bus configuration" as described in paragraph 41 of the application.

Claim 11

Applicant agrees that Smiley provides many elements of the present invention, including a common connection point for programming EEPROM devices on multiple boards of a system.

Applicant's claims, however, use "verifying" in the sense of checking that a configuration code is compatible with the board to be programmed, not in the sense of readback of a code to verify it has been correctly programmed into the board as assumed in the Examiner's rejection. Applicant's use of "verifying" is clearly stated in the claim as "verifying the *compatibility* of the configuration code *with* a circuit board". Applicant's interpretation of "verifying" in claim 11 is supported by paragraphs 41 and 42 of the specification.

Large system manufacturers may have hundreds of board designs, each of which may have several versions and be associated with dozens of preproduction and production versions of configuration code; the thousands of configurations codes may easily result in a confused technician attempting to program a board with configuration code intended for a different board. Programming boards with configuration code intended for different board designs may result in improper operation of the system.

The step of verifying in claim 11 means that information, such as the board identifying information (and in claim 15 JTAG bus configuration information) is read from the board and *compared* to information in or associated with the configuration code *before* erasing and programming EEPROMS on the board. When this information indicates an incompatibility of code to board, programming of the board is prevented.

The JTAG bus configuration is defined in Paragraph 41 as including the number and types of devices on the bus. For example, a configuration code for a board may provide data for a 64-Kbyte, and two 32-Kbyte EEPROMs, in that order, on the bus. If the JTAG bus of a board is determined to have three 32-Kbyte EEPROM's, then that code is probably wrong for that board and programming should not proceed. Similarly, even if the configuration is correct, the board identification information may indicate that the code is for a different board type, again programming should not blindly proceed.

Nowhere in Smiley ('297), nor in applicant's admitted prior art, is there reference to verification of code *compatibility* based upon JTAG bus configuration.

The Examiner has therefore not provided a valid prima-facie case that the element of verifying compatibility, as found in Claim 11, is present in the prior art. Claim 11 should therefore be allowable.

Remaining Claims

The other remaining claims in the application are dependent upon claim 11, and therefore should also be allowable over the cited art.

CONCLUSION

The examiner has, in part by misinterpreting the context of "verifying" in Claim 11, failed to make a valid prima-facie case that Claim 11 is obvious under 35 U.S.C. § 103.

Applicant therefore respectfully requests that the enclosed amendments be entered and the application reconsidered in light of the above remarks.

If, in the Examiner's opinion, prosecution of the present application may be expedited with a telephone conference, the Examiner is encouraged to contact Applicant's attorney at the number below.

Respectfully submitted,

By:



Peter C. Knops, Reg. No. 37,659
LATHROP & GAGE L.C.
2345 Grand Blvd., Suite 2800
Kansas City, Missouri 64108
Telephone: (816) 460-5826
Facsimile: (816) 292-2001